

What is claimed is:

1. An information recording method, comprising :
adjusting a physical length of a frame of ATIP (Absolute Time In Pre-groove) information preformatted onto an optical recording medium ;
generating a logical address signal on the basis of the adjusted frame ;
and
recording user information in accordance with the logical address signal.
2. An information recording method, comprising :
converting an ID (IDentification) code of ATIP (Absolute Time In Pre-groove) information preformatted onto an optical recording medium into a linear code and adjusting a length of the converted linear code ;
generating a logical address signal by converting the adjusted linear code into a time code ;
generating a write channel clock signal varied in accordance with the logical address signal ; and
recording user information in accordance with the logical address signal.
3. In a method for recording information onto an optical recording medium, an information recording method, comprising :
detecting a carrier signal of ATIP (Absolute Time In Pre-groove) information preformatted onto an optical recording medium ;
restoring the ATIP (Absolute Time In Pre-groove) information ;
converting an ID (IDentification) code of the restored ATIP (Absolute Time In Pre-groove) information into a linear code and adjusting a length of the converted linear code ;

generating a logical address signal by converting the adjusted linear code into a time code ; and

recording user information in accordance with the logical address signal.

4. The method of claim 3, wherein the logical address signal contains an information that the length of the recorded user information is different from the length of a physical address preformatted onto the optical recording medium.

5. The method of claim 3, wherein the linear code is varied in accordance with a recording density of the optical recording medium.

6. An information recording apparatus, comprising:

a means for converting an ID (IDentification) code of ATIP (Absolute Time In Pre-groove) information preformatted onto an optical recording medium into a linear code and adjusting a length of the converted linear code ;

a means for generating a logical address signal by converting the adjusted linear code into a time code ; and

a means for recording user information onto a recording medium in accordance with the logical address signal.

7. The apparatus of claim 6, wherein the logical address signal contains an information that the length of the recorded user information is different from the length of a physical address preformatted onto the optical recording medium.

8. The apparatus of claim 6, wherein the linear code is converted in

accordance with a recording density of the optical recording medium.

9. An information recording method, comprising :

detecting a carrier signal in an optical recording medium preformatted as first unit regions by modulating a synchronous signal dividing a track into first unit regions having a certain volume and address information indicating the first unit regions as time information format ;

reproducing the address information by the detected carrier signal ;

converting the reproduced address information into a linear code ;

generating logical address information indicating second unit regions by counting the linear code with a clock signal varied in accordance with a volume of second unit regions different from the volume of first unit regions ;

generating a record clock signal varied in accordance with a recording density of the second unit regions ; and

recording user information onto the optical recording medium so as to correspond to the second unit regions by synchronizing with the record clock signal.

10. The method of claim 9, wherein a quantity of the user information allocated to the second unit regions is equal to a quantity of the user information allocated to the first unit regions.

11. The method of claim 9, wherein the generating process for generating the logical address information comprises the step of :

converting the linear code indicating the second unit regions into a time code.

12. An information recording apparatus, comprising :

a carrier signal detecting means for detecting a carrier signal in an optical recording medium preformatted as first unit regions by modulating a synchronous signal dividing a track into first unit regions having a certain volume and address information indicating the first unit regions as time information format ;

a decoding means for reproducing the address information by the detected carrier signal ;

a linear code converting means for converting the reproduced address information into a linear code ;

an address generating means for generating logical address information indicating the second unit regions by counting the linear code with a clock signal varied in accordance with a volume of the second unit regions different from the volume of the first unit regions ;

a record clock signal generating means for generating a record clock signal varied in accordance with a recording density of the second unit regions ;
and

an information recording means for recording user information onto the optical recording medium so as to correspond to the second unit regions by synchronizing with the record clock signal.

13. The apparatus of claim 12, wherein a quantity of the user information allocated to the second unit regions is equal to a quantity of the user information allocated to the first unit regions.

14. The apparatus of claim 12, wherein the address generating means comprises a time code converting means for converting the linear code indicating the second unit regions into a time code.